

Awareness of Antenatal and Postnatal Physical Therapy Care in Hyderabad

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ABSTRACT

Objective: To assess the awareness of antenatal and postnatal physical therapy care in Hyderabad, Pakistan.

Study Design: Cross-sectional study.

Place & Duration: Liaquat University of Medical & Health Sciences, Jamshoro, Sindh, Pakistan from 1st November 2012 to 30th April 2013.

Material & Methods: A total of 377 participants were included in this study, participants of the study fall in childbearing age (15-45 year old). Females with menopause and above 45 year old are excluded from the study. A self-administered questionnaire was used to determine the level of awareness among the participants.

Results: Only 52 out of total number of participants had awareness of physical therapy in obstetrics and gynecology, as only 13.8% participants were aware of physical therapy in pregnancy. The remaining 86.2% participants were not aware about the physical therapy plan in obstetrics and gynecology.

Conclusion: Awareness level of physical therapy in antenatal and postnatal obstetrics and gynecology is low in general population of Hyderabad. Most of the participants are unaware of the importance of antenatal and postnatal physical therapy.

Keywords: Pregnancy, Antenatal, Postnatal, Physiotherapy, Exercise, Rehabilitation.

INTRODUCTION:

Women's health that highlights the physical, psychological and environmental factor that affect health of women throughout their lifespan; adolescence (14-25 years old) to menopause (40-45 years old).¹ The role of physiotherapy is important in management of women's physical and psychological changes, women have many queries about the good health and fitness as

women suffer with many problems about their health issues which include decision about daily health, family planning, fertilization, gestation and menopausal stage of life.² The pregnancy and postpartum period in women's life presents a unique gender-based clinical practice for the physical therapist, pregnancy is a time of tremendous musculoskeletal, physiological, and emotional change.² Physical therapy is a healthcare profession related to human movement, fitness and health of particulars.² Physical therapists have a comprehensive knowledge about the human body how it bring change during pregnancy and therapists are also well informed and qualified to evaluate and enhance physical fitness during and after pregnancy.² The structural and physiological alteration occur in body is due to four factors which are: physiological changes occur in muscles and collagen tissues are due to hormonal mediation, blood flow increased toward the uterus and the kidneys results volume of hemoglobin

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increase, uterus enlargement and displacement is result of fetus growth, and ultimately the raise in weight of body and the center of gravity varies with the alignment of posture.³

Women encounter some common changes in her antenatal and postnatal period which require physical therapy; Physical therapy has an important role in pregnancy-induced pathology including pelvic floor dysfunction, diastasis recti, postural back pain, sacroiliac pelvic girdle pain, nerve compression, joint laxity.⁴⁻⁶ Obstetrics and gynecology which focuses on the health of women antenatal information should be given as woman-centered care plan following schedule, and postnatal care is most important care in healthy society; the care plans follow woman and baby centered care.^{7,8} Several studies have reported the importance of physical to regain fitness and avoid complication.^{7,8} Hence, the present study was conducted to evaluate the awareness of antenatal and postnatal physical therapy in gynecology and obstetrics in general population of Hyderabad.

MATERIAL & METHODS:

Three hundred and seventy seven participants were selected from different hospitals and in general population of Hyderabad district. Sample size was calculated on Rao soft sample size calculator. All questionnaires were filled in obstetrics and gynecology unit of different hospitals and in general population of Hyderabad district. The duration of study was six months from 1st November 2012 to 30th April 2013. Non probability convenience sampling technique was used. A self-constructed questionnaire was used in this study. Self-administered questionnaires in English and Sindhi with consent form were distributed to all participants. Participants were asked to complete the self-administered questionnaire. Most of the participants were unable to read and fill the questionnaire by themselves; so an interview was taken by researcher in order to fill the questionnaire.

Participants included in this study were young adult and middle aged females and aged between 15 to 45 years. The female participant fell into the child bearing age group (15-45years).

Females with menopause were excluded from this study. A self-administered questionnaire was used as a data collection tool as it is useful method of covering a large population in a relatively short time and economically it is a cheap method rather than any other. The data was entered in Statistical Package for Social Sciences (version 16.0). Descriptive statistics were applied to analyze the data.

RESULTS:

There were 377 participants involved in the study, 219 participants belonged to urban area and 158 participants belonged to rural area. The study involves 261 normal delivery 100 cesarean section and 16 participants belonged to high risk pregnancy. Table 1

We notice that only 52 out of total number of participants have awareness of physical therapy in antenatal and post-natal obstetrics and gynecology, as only 13.8% participants are aware of physical therapy in pregnancy in general population of Hyderabad. Table 2

Table-1: Demographic Variable of the Participants

Question	Response	Frequency (%)
Age in years	15-25	128(34)
	26-35	199(52.8)
	36 or above	50(13.2)
Qualification	Primary or below	116(30.8)
	Matric	96(25.5)
	Intermediate	84(22.3)
	Graduate / above	81(21.5)
Locality	Urban	219(58)
	Rural	158(42)
Period of Pregnancy	Antenatal	211(56)
	Postnatal	166(44)
Type of Pregnancy	Normal	221(69.2)
	Cesarean	100(26.6)
	High risk	16(4.2)
	pregnancy	
Stage of Pregnancy	1st Trimester	50(13.3)
	2nd Trimester	76(20.2)
	3rd Trimester	85(22.5)
	Postnatal	144(44.0)

Table-2: Questions Regarding Awareness Plan of Care

Do you know about physical therapy	Yes No	226(59.9) 151(40.1)
Have you ever been advice to join physical therapy care plan during/after pregnancy	Yes No Don't know	52(13.8) 210(55.7) 115(30.5)
Do you aware when do you require physiotherapy in your pregnancy	Yes No Don't know	9(2.4) 131(34.7) 237(62.9)
Did your GP advise you about your antenatal care	Yes No	258(68.4) 119(31.6)
Does your GP refer you to physiotherapist for first antenatal appointment, called the booking appointment?	Yes No Don't know	43(11.4) 289(76.9) 45(11.6)
Do you know about antenatal visit in physiotherapy care plan	Yes No Don't know	48(12.7) 267(70.8) 62(16.4)
Do you know about booking visit? Were you on booking list	Yes No	212(56.2) 165(43.8)
Dis you suffer from backache and foot edema during first trimester?	Yes No	217(57.6) 160(42.4)
Dow you expect exercises can help in some relief from backache	Yes No Don't know	105(27.9) 59(15.6) 213(56.5)
Do you know any exercise or position to manage-foot edema	Yes No	30(80.0) 347(92.0)
Do you advised in you pregnancy to move your foot regularly (up and down) to maintain blood circulation	Yes No	89(23.6) 288(76.4)
Do you think exercise plan is good for your physical health	Yes No Don't know	143(37.9) 13(3.4) 221(58.6)
Did you advised how to minimize stress on spine with posture change? (e.g. sitting, lying, standing)	Yes No	229(60.7) 148(39.3)
Do you want physical fitness of your body after pregnancy	Yes No	298(79.0) 148(39.3)
Did you advise exercise plan pre and post-delivery?	Yes No	52(13.8) 297(78.8)

DISCUSSION:

The participants in this study were between young adult and middle aged people and their age varies between 15 to 45 years, child bearing age group. The results of this study indicate decrease level of awareness and antenatal and post-natal exercises, only 13.8% of the respondents were aware of the importance of antenatal and postnatal exercises during their pregnancy. Nonetheless, decreased percent respondents indicated that they should perform these exercises daily in their pregnancy.

Based on the data collection, we noticed that many general physician and gynecologist were not aware to refer the participant antenatal and postnatal physiotherapy. We found study on attitude and practices of obstetricians and gynecologists towards involvement of physiotherapists in management of obstetric and gynecologic conditions study on medical professional practice was done by Oguntibeju O et al was published in 2013 in this study conclusion was drawn that physicians know the importance of physical therapy but they are not used to refer patient to join physical therapy care plan.⁹ In that study, 80.6% of the participants were agreed with the importance of physical therapy in gynecology and obstetrics rehab but they were not refers by their physicians.⁹ In our study, only 11.4% participants were referred for physical therapy care plan. Another study by Ismail SI, was done to describe the importance follow up of guidelines designed by National Institute for Clinical Excellence and they conclude that knowledge of client and the practice followed in prenatal exercises plan for pelvic girdle floor does not match with the guidelines, they recommend to design plan to enhance knowledge.¹⁰ Similarly, in our study, only 52 participants out of 377, have exercise plan in pregnancy provided by an healthcare professional.

A study by Kramer et al concluded that regular aerobic exercise in pregnant state seems to improve and maintain physical health of women.¹¹ According to the data collected in Hyderabad, we found that 37.9% participants think that exercise can improve and maintain their health. The research

on physiotherapy in obstetrics by Karowicz et al presented physical activity in pregnant state, active preparation for the delivery and rehabilitation after delivery are the factors that can affect quality of life of a woman at those stages of life.¹² Moreover, treatment and prevention of leg edemas decreases the risk of hospitalization.¹² A review conducted in 2006 looked at interventions for preventing and treating back and pelvic pain in pregnancy by Pennick V E et al; shows confirmation that the physical exercise plan, exercise for floor of the pelvic girdle, and different exercise in hydrotherapy decrease the severity of backache as compared with the standard antenatal care.¹³ In our study, 27.9% of the population was aware about physical therapy management in backache.

In this study, we limited the population to the hospitals of Hyderabad district. Participants belonged to different areas and had different languages to communicate, while filling the questionnaire we faced language barrier. Few of the hospitals had denied providing data from the hospital.

CONCLUSION:

Awareness level of physical therapy in antenatal and postnatal obstetrics and gynecology is low in general population of Hyderabad. A number of measures can be taken to improve awareness, the hospital information updated leaflets, and a number of posters may be developed to show role and importance of physiotherapy in pregnancy.

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